

Before the  
**FEDERAL COMMUNICATIONS COMMISSION**  
Washington, DC 20554

In the Matter of

Wireless Telecommunications Bureau Invites	)	WT Docket No. 08-61
Comments on Draft Environmental Notice	)	WT Docket No. 03-187
Requirements and Interim Procedures	)	
Affecting the Antenna Structure Registration	)	
Program	)	

**To: The Commission**

**COMMENTS**

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## Summary

At the outset, the Blooston Commenters support the ideals of the Memorandum of Understanding (“MOU”) described in the Commission’s EA Public Notice. The Commenters urge the Commission to adopt a process whereby the Commission and the public can review those proposals that will truly have the potential to adversely affect avian mortality, while utilizing safe-harbor mechanisms for all other proposals where the expected impact on avian mortality would be minimal or non-existent. In this regard, the Commenters note the estimate of the U.S. Fish & Wildlife Service that avian mortality due to collisions with antenna structures amounts to less than one percent of all avian deaths. As a result, the Commenters urge the Commission to utilize a balanced approach to resolving this issue.

Under the Commission’s current proposal, virtually every communications tower that is subject to notice to the Federal Aviation Administration – and hence, registration with the Commission – would be subject to local and national notice requirements and a potentially lengthy comment and review period before the proponent can even file its application for antenna structure registration. Because of the potential for filings that could be made for the sole purpose of delay, the Commenters urge the Commission to utilize a programmatic or categorical/safe-harbor exemption approach similar to that used in the context of historic preservation. Under this approach, towers meeting certain criteria would be categorically exempt from environmental processing for purposes of determining impacts on avian mortality while towers that do not meet the exemption criteria could be subjected to environmental processing if requested by the public and the Commission is not able to issue a Finding of No Significant Impact (“FONSI”). In this way, the Commission would be able to reduce the potential overload on its limited resources and focus its attention on those towers that truly merit an environmental review.

It is respectfully submitted that a local notice process is not necessary. In *American Bird Conservancy*, the Court clearly acknowledged the petitioner’s agreement that national notice was sufficient to meet the public notice requirement. Inasmuch as the Commission will be placing all non-exempt applications on national public notice, much like it does for all other public notices, local notice is an unnecessary and duplicative step that will likely not have the impact that it once had due to substantial declines in newspaper circulation.

Irrespective of the process selected by the Commission, the Commission must establish safe harbors in order to ensure that communications needs can be met efficiently in order to protect property and life. The Commenters believe that the use of the MOU, with certain modifications, would provide a genuine safe harbor for applications that would not be expected to have an adverse effect on avian mortality. These modifications would simplify the process for lighting structures considered “more favorable” in the

MOU – namely, those using white strobe obstruction lighting. It is red steady burning/pulsating obstruction lighting that American Bird Conservancy indicated as a threat to migratory birds in its Joint Comments filed November 11, 2003.

Finally, the Commission should adopt a “shot-clock” mechanism in order to ensure the timely processing of Requests for Environmental Processing and environmental assessments (“EAs”). This shot-clock, which would be similar in concept to the shot-clock advocated by CTIA in connection with processing of state and local zoning applications for the siting of wireless communications facilities, would place a time limit on the Commission to act. If the Commission has not affirmatively acted on the Petition for Environmental Processing or the EA within the time allotted, then it will be deemed to have issued a FONSI, unless a public notice is issued to extend the shot-clock deadline by an additional 30 days – which deadline will not be eligible for further extension. By following these procedures, the Commission will have had a reasonable opportunity to make its determination without unduly delaying tower construction for those projects that should not have an adverse impact on avian mortality.

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**To: The Commission**

**COMMENTS**

Blooston, Mordkofsky, Dickens, Duffy & Prendergast, LLP, on behalf of its telecommunications and/or tower owner clients listed in Attachment A hereto (the “Blooston Commenters” or “Commenters”), hereby submits its comments in response to the Commission’s Public Notice, dated March 25, 2011, entitled “Wireless Telecommunications Bureau Invites Comment on Draft Environmental Notice Requirements and Interim Procedures Affecting the Antenna Structure Registration Program” (DA 11-558) (“EA Public Notice”).

For the reasons stated below, the Commenters urge the Commission to adopt a process whereby the Commission and the public have the ability to review those proposals that will truly have the potential to adversely affect avian mortality, while utilizing a safe-harbor approach for all other proposals where the expected impact on avian mortality is minimal or non-existent. In this way, the vast majority of antenna tower construction projects could proceed without undue

delay or additional cost, while those proposals that would likely have an adverse impact on avian mortality could be reviewed in a manner similar to the procedures set forth in the May 4, 2010 Memorandum of Understanding Between the Infrastructure Coalition and the Conservation Groups Concerning Interim Antenna Structure Registration Standards (“MOU”) described in the EA Public Notice. This safe-harbor approach would serve the public interest because it would focus the Commission’s scarce resources only on those proposals that truly merit enhanced scrutiny.

**I. Because Antenna Towers are Not a Principal Cause of Death to Migratory Birds, the Commission Must Use a Balanced Approach in Order to Comply with NEPA Requirements.**

**a. Antenna Towers are Not the Principal Culprit in Avian Mortality**

Over the years, the Federal Government has conducted studies and reviewed substantial amounts of research – coming to the conclusion that communications towers are not the principal cause of avian mortality. In January, 2002, the U.S. Fish & Wildlife Service released a fact sheet entitled “Migratory Bird Mortality” (copy attached for convenient reference) in which it estimated that

there are approximately one billion avian deaths per annum, due to the following causes:<sup>1</sup>

- Cats – Hundreds of Millions
- Collisions with Windows – 97 million
- Poisonings – 72 million
- Collisions with Motor Vehicles – 60 million
- Collisions with High Power Lines – Tens of Millions
- Collisions with Communications Towers – 4 to 5 million
- Oil and Waste Water Pits – 2 million

While the number of tower related avian deaths seems large, it is statistically insignificant when put in context of all avian mortality in the United States. In fact, out of the U.S. Fish & Wildlife Service's estimated one billion avian deaths annually, collisions with communications towers represent one half of one percent of all avian deaths. Moreover, only a fraction of towers constructed in the United States are of a height and utilize the type of lighting that has been identified as having a potential impact on migratory birds. These facts, coupled with disputes in the record on the accuracy of environmental research on the subject, support the conclusion that any measures addressing the potential for avian collisions with communications towers should not create significant delays for all towers that require the filing of an Antenna Structure Registration (ASR). With this principle in mind, the Commenters wish to express their appreciation to CTIA and the environmental groups for negotiating the MOU that frames and narrows the issues in this proceeding; and the Commenters hereby submit their

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<sup>1</sup> The fact sheet indicates that the above numbers are estimates, and that the numbers for tower collisions could be higher. However, the fact sheet indicates that the numbers for other categories could be higher as well.

suggestions on those matters on which the parties to the MOU could not reach agreement.

**b. The Commission's Interim Rules Must Use a Balanced Approach.**

The Commenters believe that the Commission's proposal, with respect to modifications of existing communications towers and the construction of new communications towers, will be unduly burdensome, given the minimal impact of communications towers on avian mortality. Under the current proposal, virtually every communications tower that is the subject of notice to the Federal Aviation Administration – and hence, registration with the Commission – will be subject to a local notice requirement, and national public notice requirement and a potentially lengthy comment and review period before the proponent can even file an application for antenna structure registration. This process will put all future communications tower construction at the mercy of any person who may seek to utilize the process to block or delay as many communications towers as possible – without true regard for whether the construction and obstruction marking and lighting of the particular communications tower would likely cause harm to migratory birds. Thus, the mere filing of a timely Request for Environmental Processing, however unmeritorious, could result in significant delay while the Commission determines whether it can issue a "Finding of No Significant Impact" ("FONSI").



Commenters also note that the Commission does not appear to have enforcement authority over the public in the context of filing complaints and other actions against Commission regulatees. As a result, Commenters fear that many of the Requests for Environmental Processing, which have been empowered by the Court of Appeals for the District of Columbia Circuit in *American Bird Conservancy v. FCC*,<sup>2</sup> may essentially be frivolous and filed for the sole tactic of delay – especially where there may have been underlying land-use disputes at the local level that were ultimately resolved in favor of the communications tower.

In order to mitigate the potential for abuse, especially in view of the minimal impact that most communications towers appear to have on avian mortality, the Commenters urge the Commission to utilize a programmatic or categorical/safe-harbor exemption approach similar to that used in the context of historic preservation.<sup>3</sup> Under this approach, towers meeting certain criteria – e.g., under 450 feet above ground level and utilizing favorable obstruction marking and lighting (high intensity or medium intensity white lighting) – would be categorically exempt from environmental processing for purposes of determining the impact on avian mortality. Those communications tower proposals that do not meet the exemption criteria could be subjected to environmental processing if requested by the public and the Commission is not able to issue a FONSI based upon the filing of responsive pleadings. By utilizing this procedure, the

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<sup>2</sup> 516 F.3d 1027 (D.C. Cir. 2008) (*American Bird Conservancy*).

<sup>3</sup> See Appendix C to Part 1 of the Commission's Rules (Nationwide Programmatic Agreement Regarding the Section 106 National Historic Preservation Act Review Process).

Commission would be in position to reduce the potential for overloading its limited resources and focus its attention on those communications towers that truly merit an environmental review.

c. **The Commission's Local Notice Procedure is Not Required by *American Bird Conservancy*.**

The Commission has proposed, in proposed Rule Section 17.4(c)(3), to require the proponent of a new antenna structure or modification of an existing antenna structure to provide local notice through publication in a newspaper of general circulation (or other appropriate means such as through the public notification provisions of relevant local zoning processes). This notice would be in addition to (and a prerequisite for) national notice on the Commission's web site in accordance with proposed Rule Section 17.4(c) (4). The Commenters respectfully submit that the requirement for local notice places an unnecessary burden and expense on the proponent of an affected antenna structure, especially where the Court indicated that national notice on the Commission's website would be sufficient.<sup>4</sup> Further, it is well known that newspaper circulation has dropped significantly as news has become readily available over the Internet.<sup>5</sup> As a result, readership is down and the placement of legal notices in newspapers of general circulation is becoming a less reliable, but nevertheless burdensome, method for

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<sup>4</sup> See *American Bird Conservancy* at 1035 (The Court noted that "[i]t was suggested during oral argument that a simple solution would be for the Commission to update its website when it receives individual tower application; Petitioners stated that such a step would address their NEPA notice claim"). While the Court did not specify the type of notice that would be required to satisfy NEPA requirements, its opinion certainly telegraphed the minimum notice requirement that would satisfy its mandate on remand.

<sup>5</sup> See e.g., <http://www.nytimes.com/2009/04/28/business/media/28paper.html>

providing notice to the public. In view of the American Bird Conservancy's agreement that national notice is sufficient and the fact that newspaper circulation is in significant decline, the Commission should rely solely on its Internet website to provide the requisite notice to the public. The Commission, NTIA and the Administration have recognized the need for rapid deployment of wireless broadband, as evidenced by the Commission's National Broadband Plan and the awarding of numerous stimulus grants for wireless projects. It does not serve the public interest to introduce unnecessary delays in the construction of all towers requiring registration, when this will slow the progress of broadband deployment.

**II. Regardless of the Process Ultimately Selected by the Commission, It Must Provide Safe Harbors in order to Ensure that Communications Needs Can be Met Efficiently.**

Commenters believe that the Commission has taken a very aggressive approach that will harm the ability of communications carriers and private internal users to meet their communications needs – whether the communications is commercial in nature, related to internal business needs or essential to the protection of property and life. As indicated above, the U.S. Fish & Wildlife Service concluded in January, 2002, that communications towers were responsible for less than one percent of avian mortality, a percentage that cannot be deemed to be statistically significant when put into context with avian mortality in general – e.g., deaths resulting from collisions with automobiles and building windows as well as deaths resulting from natural predators such as cats.

While the Commenters understand that the Commission is bound by the Court's decision in *American Bird Conservancy*, the process taken by the Commission to meet the Court's requirements must be balanced in such a manner to ensure that human life and property are likewise protected. In this regard, the Commission cannot lose sight of the vital services that wireless communications and broadcast operations provide to the public. If broadcasters are not able to construct communications towers of sufficient height, the signal propagation will be insufficient to broadcast news, emergency warnings and other relevant information to large population centers. Similarly, if wireless carriers become limited to installations of communications towers below 200 feet above ground level, in order to avoid a notice requirement to the FAA and subsequent registration requirement with the Commission because the process has become fraught with unnecessary litigation and delay, they will be required to install additional lower-elevation antenna towers in order to achieve adequate signal coverage. This would impose additional costs and delays that would otherwise not be necessary.

These same considerations also apply to the design and implementation of industrial, critical infrastructure and public safety users who construct wide area systems in order to facilitate efficient communications. The costs associated with the siting of additional antenna towers whose height is below the threshold required for notice to the FAA and registration by the Commission can be significant. Apart from the regulatory costs associated with local approvals (e.g.,

zoning), there are additional costs associated with the acquisition of real estate, construction of transmitter housings, antenna towers, antenna costs, engineering costs, etc. that would not be required if the licensee could operate from a single location with a higher-elevation antenna.

The May 4, 2010 MOU was filed with the Commission with a view toward determining which communications tower proposals would merit enhanced scrutiny by the Commission. While the Commenters support the intent of the MOU reached between the Infrastructure Coalition and the Conservation Groups, they believe that certain modifications, described below, are essential to making it a workable safe-harbor that will protect the efficient processing of applications for antenna structure registration and promote the cost-efficient deployment of communications services to the public. As a result, the Commenters urge the Commission to adopt the following interim safe-harbor:

*New Construction*

- Proposals for new communications towers above 450 feet AGL (not including masts installed on buildings) would require the inclusion of an Environmental Assessment;
- Proposals for new communications towers between 351 feet AGL and 450 feet AGL would require national notice by the Commission to the public – but not the filing of an Environmental Assessment based upon avian concerns (provided obstruction lighting is limited to high intensity or medium intensity white lighting);
- Proposals for new communications towers below 351 feet AGL would not be subject to public notice or the filing of an Environmental Assessment based upon avian concerns (provided there is no obstruction lighting or obstruction lighting is limited to high intensity or medium intensity white lighting). In the event that the proponent proposes red obstruction lighting, the notice requirements – as proposed by the Commission – would apply.

Modification of Existing Structures

- The filing of ASR applications with respect to pre-existing communications towers that do not represent a physical change (but may otherwise include corrections to geographic coordinates, ground elevation and overall height) would be exempt from public notice and environmental processing for avian concerns.
- The filing of ASR applications for the replacement of a communications tower at the same geographic location, provided that (a) the construction does not require any excavation that is more than 30 feet off of the existing antenna structure property, (b) if obstruction lighting is required, the communications tower will utilize either high intensity or medium intensity white lighting; (c) there will be no substantial increase in the height of the communications tower as defined by Section I(C)(1) – (3) of Appendix B to Part 1 of the Commission’s Rules (Nationwide Programmatic Agreement for the Collocation of Wireless Antennas).
- ASR applications proposing the following modifications to existing communications towers would be exempt from public notice and environmental processing for avian concerns:
  - o Any construction, modification or alteration on federal lands where another federal agency assumes responsibility for evaluating potentially significant environmental affects or where another federal agency – pursuant to written agreement with the Commission – has assumed such responsibilities.
  - o Any construction, modification or alteration that does not alter the physical structure, geographic location or obstruction lighting provided that the applicant is proposing the use of no obstruction lighting, high intensity lighting or medium intensity lighting (or in the case where an unfavorable method of lighting was utilized, the proponent proposes the use of a more favorable obstruction lighting scheme).

Administrative Changes

- Applications for administrative update or ownership change would be exempt from public notice and environmental processing.

The Commenters believe that while the use of high intensity white lighting might be the best solution, medium intensity white lighting should likewise be

recognized as an acceptable alternative not requiring special review. The use of high intensity white lighting is not practicable in all applications due to local approval considerations, and medium intensity white lighting should provide a similar effect in minimizing the potential for avian collisions with communications towers.

The record in this proceeding reflects that the primary area of concern, with respect to obstruction lighting, is the potential impact of solid red or red pulsating obstruction lighting on avian navigation – particularly during nighttime hours with poor visibility.<sup>6</sup> In its *Joint Comments*, the Joint Commenters noted that “[t]he best science available indicates that particularly in poor visibility weather conditions at night, lights on towers (especially red solid state red lights) disrupt neotropical migratory bird’s celestial navigation system and perhaps its magnetic navigation system.”<sup>7</sup> The Joint Commenters stated further that “[t]his resulting disorientation causes the birds to fly to the light source and circle the light source at the tower, causing the bird to be unable to establish its directional cues, and greatly increase the probability of striking the tower and guy wires, flying into other birds also circling, or losing most navigational capability and flying into the ground or ancillary structures.”<sup>8</sup> In reaching these conclusions, the Joint Commenters cited several scientific documents, including: “The Behavioral

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<sup>6</sup> See e.g., Comments of American Bird Conservancy, Forest Conservation Council, and Friends of the Earth in response to FCC Notice of Inquiry in WT Docket No. 03-187 dated November 11, 2003 (hereinafter, “*Joint Comments*”).

<sup>7</sup> *Id.* at 14.

<sup>8</sup> *Id.*

Responses of Migrating Birds to Different Lighting Systems on All Towers” by Sidney A. Gauthreaux, Jr. Ph.D. and Carroll G. Belser; “Why be Concerned About Light Pollution?” by B. Broderick *Royal Astronomical Society of Canada Bulletin* (June 1995); and “Attraction of Nocturnal Migrants by Lights on a Television Tower” by William W. Cochran and Richard R. Graber, *Wilson Bulletin* 70:378-380 (1958). The Joint Commenters also noted that two coastal TV towers at Awendaw, South Carolina had significant bird kills during the early 1980s. Following the conversion of their obstruction lighting, from red incandescent lights to white strobe light in the early 1990s, few dead birds have been found at those towers. The Joint Commenters conclude that this anecdotal evidence supports the research that “the use of minimal lighting and white strobes cause significantly less mortality than red solid state or pulsating lights.”<sup>9</sup> Based upon the research proffered by the Joint Commenters, environmental scrutiny should be limited to the use of red solid state or pulsating obstruction lighting while white strobe lighting is permitted to fall into the safe harbor. Thus, if the ASR applicant proposes the installation of red obstruction lighting, which the Commission has previously found can have a potential adverse impact on migratory bird navigation under certain circumstances,<sup>10</sup> the applicant would be subject to public notice and the potential filing of an Environmental Assessment with respect to any potential effect on avian mortality. This strikes a reasonable balance of ensuring that the

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<sup>9</sup> *Id.* at 15.

<sup>10</sup> *Notice of Proposed Rulemaking*, In the Matter of Effects of Communications Towers on Migratory Birds, (WT Docket No. 03-187) (FCC 06-164) (Rel. November 7, 2006) at 41.



issue of avian mortality is appropriately addressed while ensuring that carriers and users are able to deploy communications towers in an efficient manner without undue cost and delay.

### **III. The Commission Should Adopt a “Shot-Clock” Mechanism for Requests for Environmental Processing and for Environmental Assessments.**

Commenters are concerned that the Commission’s procedures do not sufficiently encourage the efficient processing of Requests for Environmental Processing or Environmental Assessments (“EAs”) by proponents of antennas structures. In order to ensure the timely processing of such requests and EAs, while ensuring that the construction of antenna towers is not unduly delayed, Commenters propose that the Commission adopt a “shot-clock” mechanism that is modeled after the shot-clock that was advocated by CTIA in connection with the processing of state and local zoning applications for the siting of wireless communications facilities.

Commenters believe that a similar mechanism would be appropriate for the evaluation of requests for environmental processing and EAs and recommend the following shot-clocks: (a) for Petitions for Environmental Processing – 30 days after the close of the pleading cycle and (b) for EAs, 90 days after the filing of an EA or an amendment to an EA. After the shot-clock period ends, if the Commission has taken no affirmative action, it will be deemed to have issued a FONSI. In those circumstances where the Commission cannot meet the initial shot-clock deadline, it may extend the deadline by up to 30 additional days by

issuing a public notice prior to the shot clock deadline – which deadline will not be eligible for further extension. By following these procedures, the Commission will have had a reasonable opportunity to make its determination, without unduly delaying tower construction for those projects that should not have an adverse impact on avian mortality. Otherwise, there will be an undue delay in the construction of towers needed for the rapid broadband deployment, public safety networks or industrial communications facilities needed to bolster our economy.


#### **IV. Conclusion.**

For the forgoing reasons, Commenters urge the Commission to adopt a safe-harbor that will permit the efficient processing of applications for antenna structure registration while taking appropriate steps to prevent unnecessary avian mortality.

Respectfully submitted,

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## Attachment A

AAA Oregon/Idaho  
All West Communications, Inc.  
BEK Communications Cooperative  
Chillicothe Telephone Company  
Citizens Telephone Company of Higginsville, Missouri  
CL Tel Wireless, Inc.  
Consolidated Edison Company of New York, Inc.  
County of Ocean, New Jersey  
CP Kelco U.S., Inc.  
Emery Telcom  
Hinton Telephone Company of Hinton, Oklahoma, Inc.  
JB Towers, LLC  
J.M. Huber Corporation  
Louisiana Cellular, Inc.  
Manti Tele Communications Company, Inc.  
Mobile Phone of Texas, Inc.  
Northeast Louisiana Telephone Company, Inc.  
Penasco Valley Telephone Cooperative, Inc.  
RCS Communications  
Smithville Communications, Inc.  
Smithville Spectrum, LLC  
Star Telephone Company, Inc.  
Uintah Basin Electronic Telecommunications d/b/a Strata Networks  
United Wireless Communications, Inc.  
Venture Communications Cooperative  
xG Technology, Inc.



U.S. Fish & Wildlife Service

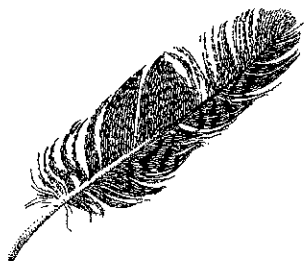
# Migratory Bird Mortality

## *Many Human-Caused Threats Afflict our Bird Populations*

### Migratory Bird Management

#### Mission

*To conserve migratory bird populations and their habitats for future generations, through careful monitoring and effective management.*



#### Are Birds in Danger?

Of the 836 species of birds protected under the Migratory Bird Treaty Act, about a quarter are known to be in trouble. There are 78 bird species listed as Endangered and 14 species listed as Threatened in the U.S. An additional 144 species are on the National list of Birds of Conservation Concern 2001 (some whose populations are declining precipitously). It cannot be assumed that the remainder of U.S. birds are safe, as population data on essentially a third of these species are lacking, making status determination very difficult if not impossible. The problems that birds face in the U.S. are symptomatic of the problems they face globally.

#### What Are the Human-Caused Threats to Birds?

Birds face tremendous challenges to their survival every day. The majority of these challenges are related to human activities. Vast numbers of birds are killed due to collisions with human structures and equipment, poisoning by pesticides and contaminants, and attacks by cats and other introduced predators.

Diseases such as botulism, avian cholera, salmonellosis, and emerging West Nile virus can also have significant population impacts. Human activities, such as overuse of pesticides (enhancing the survival of pesticide-resistant mosquitoes), for example, can help spread certain diseases.

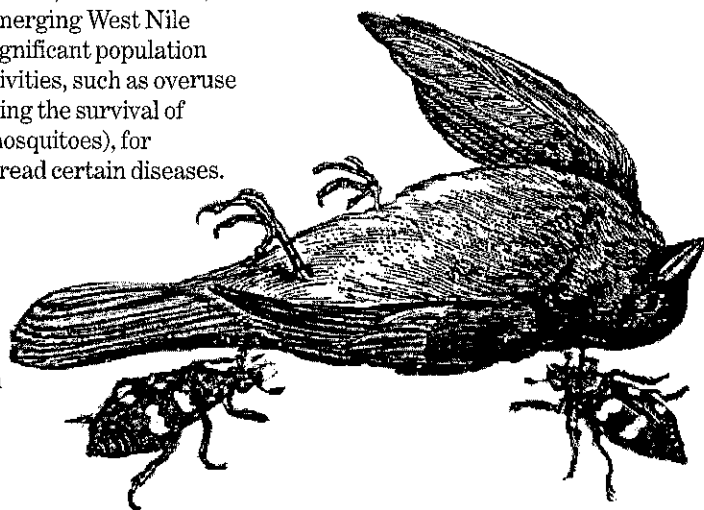
The greatest threat to birds, and all wildlife, continues to be loss and/or degradation of habitat due to human development and disturbance. For migratory birds and other species that

require multiple areas for wintering, breeding, and stopover points, the effects of habitat loss can be complex and far-reaching.

Added to deaths from natural causes, such as adverse weather, predation, or starvation, human-related bird deaths may result in greater mortality than a population can withstand. In other words, it is the cumulative or combined impact of all mortality factors that concerns scientists most. Thus, anything done to reverse human-related bird deaths – and thus potential impacts to bird populations – are of considerable interest to the Service.

#### How Many Birds are Killed?

The U.S. Fish and Wildlife Service estimates that a minimum of 10 billion birds breed in North America. Fall populations may be on the order of 20 billion. These figures represent only educated guesses. Mortality figures are also difficult to determine. Based on modeling and other approaches, estimates have been made for some of the most visible threats.



**Collisions.** Building window strikes may account for 97 to 976 million bird deaths each year. Communication towers conservatively kill 4 to 5 million birds annually (possibly closer to 40 to 50 million; a nationwide cumulative impacts study should help resolve this question). Strikes at high tension transmission and distribution power lines very conservatively kill tens of thousands of birds annually. Taking into account the millions of miles of bulk transmission and distribution lines in the U.S., and extrapolating from European studies, actual mortality could be as high as 174 million deaths annually. Electrocutions probably kill tens of thousands of birds but the problem is barely monitored. Cars may kill 60 million birds or more each year, private and commercial aircraft far fewer, while wind turbine rotors kill an estimated 33,000 birds annually.

**Poisoning.** In one recent study, pesticides were estimated to result in the direct deaths of at least 72 million birds annually. This is an underestimate of the total deaths, given that delayed deaths from poisoned prey, orphaned chicks, and neurological problems were not included and the study site was limited. Oil spills may kill hundreds of thousands or more, depending on the severity and timing of the spill. Up to two million birds are killed annually in oil and wastewater pits, mainly in the western states.

**Cats.** Many citizens would be surprised to learn that domestic and feral cats may kill hundreds of millions of songbirds and other avian species each year. A recent study in Wisconsin estimated that in that state



*Cats cause tremendous bird mortality.*

alone, domestic rural cats kill roughly 39 million birds annually. Add the deaths caused by feral cats, or domestic cats in urban and suburban areas, and this mortality figure would be much higher.

**By-Catch.** Tens to hundreds of thousands of seabirds are estimated to die in U.S. fisheries each year. Monitoring for this, however, is again very limited.

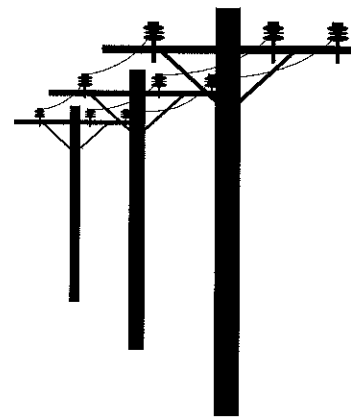
#### **What Are We Doing to Reduce Mortality?**

While the "incidental, accidental or unintentional take" of migratory birds is not permitted by the Service and is a criminal violation of the Migratory Bird Treaty Act, the Service attempts to work with those industries and individuals whose actions result in bird deaths, rather than pursuing criminal prosecution first.

For over 25 years, the Service has been a co-founding partner of the *Avian Power Line Interaction Committee* helping develop two voluntary guidance documents to reduce bird strikes and electrocutions. More recently, the Service co-founded the *Avian Subcommittee of the National Wind Coordinating Committee*, working to reduce bird strikes at wind turbines, and we founded and chair the *Communication Tower Working Group*, working to reduce bird strikes at communication towers. We also co-chair the *Interagency Seabird Working Group*, implementing a national plan of action to reduce seabird bycatch in longline fishing gear.

Because of jurisdictional and ownership issues, working to reduce cat-caused mortality, building window strikes, and oil spills is a more complex undertaking. Here, we support initiatives such as the *Cats Indoors Program* and the *Fatal Light Awareness Program*, which encourages building owners to turn off skyscraper lights during spring and fall night-time songbird migrations. For threats that can be addressed by individual citizen action, we design public education materials with related messages such as encouraging homeowners to reduce home pesticide use and consumers to select environmentally-friendly products, such as shade-grown coffee.

Declining bird populations are probably most often the result of combined or cumulative impacts of all mortality, thus addressing each of the contributing factors is a priority.



*Close-phased wires are a potential electrocution hazard.*

#### **What Else Is Needed to Reduce Mortality?**

Research is critical. In the case of collisions, for example, we don't understand specifically how light attracts birds to communication towers, tall buildings, wind turbines, transmission towers, or other lit structures. We need to learn if deterrents such as low-frequency sound, colored markers, or structural modifications reduce avian collisions. We also lack an understanding of how birds select stopover areas during spring and fall migrations. Without it, we cannot effectively manage habitats and recommend against building new structures in critical bird-use areas. Above all, the cumulative impacts of collisions on bird populations must be assessed—they are currently unknown. With the exponential increase in new structures, avian monitoring must be a priority. All of this information should be transmitted to land managers, industry representatives, and affected agencies.

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Migratory birds are some of nature's most magnificent resources. Their conservation is a critical and challenging endeavor for the Migratory Bird Management Program and all who value nature.

**For More Information:**  
**U.S. Fish and Wildlife Service**  
**Division of Migratory Bird Management**  
**4401 N. Fairfax Drive, Room 634**  
**Arlington, VA 22203**  
**703 358 1714**  
<http://birds.fws.gov>

January 2002